

What is Claimed is:

1. An ophthalmic composition comprising:
an ophthalmically acceptable carrier component;
and
a polyanionic component including a first
5 polyanionic component portion having a first molecular
weight; and a second polyanionic component portion having
a second molecular weight; the first and second polyanionic
component portions each being present in an amount
effective to provide lubrication to an eye when the
10 composition is administered to an eye, the first and second
molecular weights being different.
2. The composition of claim 1 wherein the first
molecular weight is greater than the second molecular
weight, and the composition has an increased ability to
5 adhere to an eye when the composition is administered to an
eye relative to a substantially identical composition
having an equal total amount of the polyanionic component
and substantially no first polyanionic component portion.
3. The composition of claim 1 wherein the first
molecular weight is greater than the second molecular
weight, and the composition has a reduced ability to cause
5 blurriness of vision in an eye when the composition is
administered to an eye relative to a substantially
identical composition having an equal total amount of the
polyanionic component and substantially no second
polyanionic component portion.
4. The composition of claim 2 wherein the
composition has a reduced ability to cause blurriness of
vision in an eye when the composition is administered to an

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eye relative to a substantially identical composition
5 having an equal total amount of polyanionic component and
substantially no second polyanionic component.

5. The compositions of claim 1 wherein at least one
of the first and second polyanionic component portions is
selected from the group consisting of anionic cellulosic
derivatives and mixtures thereof.

6. The composition of claim 1 wherein both the first
and second polyanionic component portions are selected from
the group consists of anionic cellulosic derivatives and
mixtures thereof.

7. The composition of claim 1 wherein at least one
of the first and second polyanionic component portions is
selected from the group consisting of anionic homopolymers
and copolymers comprising units of one or more of acrylic
5 acid, methacrylic acid, metal acrylates and metal
methacrylates, and mixtures thereof.

8. The composition of claim 1 wherein both the first
and second polyanionic component portions are selected from
the group consisting of anionic homopolymers and copolymers
comprising units of one or more of acrylic acid,
5 methacrylic acid, metal acrylates and metal methacrylates,
and mixtures thereof.

9. The composition of claim 1 wherein at least one of
the first and second polyanionic component portions is
selected from the group consisting of carboxy methyl
celluloses and mixtures thereof.

10. The composition of claim 1 wherein at least one
of the first and second polyanionic component portions is

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selected from the group consisting of homopolymers and copolymers comprising units of one or more of acrylic acid, metal acrylates and mixtures thereof.

11. The composition of claim 1 wherein each of the first and second polyanionic component portions is present in an amount of at least about 0.1% (w/v) of the composition.

12. The composition of claim 1 which has a viscosity in a range of about 15 cps to about 200 cps.

13. The composition of claim 1 wherein the polyanionic component is present in an amount in a range of about 0.2% to about 5% (w/v) of the composition.

14. The composition of claim 1 wherein the polyanionic component is present in an amount in a range of about 0.6% to about 1.8%.

15. The composition of claim 1 wherein the weight ratio of the first polyanionic component portion and the second polyanionic component portion is in a range of about 0.02 to about 50.

16. The composition of claim 1 wherein the weight ratio of the first polyanionic component portion and the second polyanionic component portion is in a range of about 0.25 to about 4.

17. The composition of claim 1 wherein the polyanionic component further comprises a third polyanionic component portion having a third molecular weight different from the first and second molecular weights, the third polyanionic component portion being present in an amount

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effective to provide lubrication to an eye when the composition is administered to an eye.

18. The composition of claim 1 wherein the carrier component includes at least one of the following: an effective amount of a buffer component; an effective amount of a tonicity component; an effective amount of a preservative component; and water.

19. The composition of claim 1 where the first and second polyanionic component portions are separately derived.

20. An ophthalmic composition comprising:
an ophthalmically acceptable carrier component;
and

a polyanionic component including at least two polyanionic component portions, each polyanionic component portion having a different molecular weight and being present in an amount of at least about 0.1% w/v of the composition.

21. The composition of claim 20 wherein the average molecular weights of any two of the polyanionic component portions differ by at least about 10,000.

22. The composition of claim 20 wherein the average molecular weights of any two of the polyanionic component portions differ by at least about 50,000.

23. The composition of claim 20 wherein the composition has an increased ability to adhere to an eye when the composition is administered to an eye relative to a substantially identical composition having an equal total amount of polyanionic component and substantially no

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polyanionic component portion with the greatest molecular weight.

5 24. The composition of claim 20 wherein the composition has a reduced ability to cause blurriness of vision in an eye when the composition is administered to an eye relative to a substantially identical composition having an equal total amount of polyanionic component and substantially no polyanionic component portion having the lowest molecular weight.

25. The composition of claim 20 wherein each of the polyanionic component portions, other than having different molecular weights, has a substantially similar chemical structure.

26. The composition of claim 20 wherein all the polyanionic component portions are selected from the group consisting of anionic cellulosic derivatives and mixtures thereof.

5 27. The composition of claim 20 wherein all the polyanionic component portions are selected from the group consisting of anionic homopolymers and copolymers comprising units of one or more of acrylic acid, methacrylic acid, metal acrylates and metal methacrylates, and mixtures there.

28. The composition of claim 20 wherein all the polyanionic component portions are selected from the group consisting of carboxyl methyl celluloses and mixtures thereof.

29. The composition of claim 20 wherein all the polyanionic component portions are selected from the group

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consisting of homopolymers and copolymers comprising units of one or more of acrylic acid, metal acrylates and mixtures thereof.

30. The composition of claim 20 wherein each of the polyanionic component portions is present in an amount of at least about 0.2% (w/v) of the composition.

31. The composition of claim 20 which has a viscosity in a range of about 15 cps to about 200 cps.

32. The composition of claim 20 wherein the polyanionic component is present in an amount in a range of about 0.2% to about 5% (w/v) of the composition.

33. The composition of claim 20 wherein the polyanionic component is present in an amount in a range of about 0.6% to about 1.8% (w/v) of the composition.

34. The composition of claim 20 wherein the carrier component includes at least one of the following: an effective amount of a buffer component; an effective amount of a tonicity component; an effective amount of a preservative component; and water.

35. A method of treating an eye comprising:
administering to the eye an effective lubricating amount of the composition of claim 1.

36. The method of claim 35 wherein the eye is afflicted with dry eye syndrome or has a propensity toward dry eye syndrome.

37. A method of treating an eye comprising:
administering to the eye an effective lubricating

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amount of the composition of claim 20.

38. The method of claim 37 wherein the eye is afflicted with dry eye syndrome or has a propensity toward dry eye syndrome.

39. A method of making an ophthalmic composition comprising:

forming a mixture of water, and a plurality of polyanionic component portions, each of the polyanionic component portions having a different molecular weight:

subjecting the mixture to effective sterilization conditions to form a sterilized mixture;

forming an additional mixture of water, and at least one of a buffer component, a tonicity component and a preservative component; and

combining the sterilized mixture and the additional mixture to form a product mixture.

40. The method of claim 39 which further comprises:

filtering the additional mixture using a sterilizing filter; and

filtering the final mixture using a clarifying filter.

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